

**Supplementary Table 7:** Fold change expression of 8 genes found in the core PRC2 complex in RMS grouped according to histology and fusion gene status.

ENTREZ	Gene	ERMS		ARMS Fusion Neg		ARMS PAX3-FOXO1		ARMS PAX7-FOXO1		ARMS NCOA1-PAX3	
		Expression <sup>a</sup> n = 36	p-value <sup>b</sup>	Expression <sup>a</sup> n = 20	p-value <sup>b</sup>	Expression <sup>a</sup> n = 34	p-value <sup>b</sup>	Expression <sup>a</sup> n = 10	p-value <sup>b</sup>	Expression <sup>a</sup> n = 1	p-value <sup>b</sup>
121536	AEBP2	6.0906	0.0000	6.7698	0.0000	4.3892	0.0000	4.7277	0.0000	2.4146	-
8726	EED	5.6127	0.0000	5.0672	0.0000	3.7274	0.0000	3.0193	0.0000	9.1551	-
2145	EZH1	0.5184	0.0000	0.5447	0.0045	0.7788	0.1934	0.7167	0.0961	0.3653	-
2146	EZH2	28.7424	0.0000	32.0741	0.0000	22.7188	0.0000	22.5406	0.0000	26.2143	-
3720	JARID2	2.0956	0.0000	2.1097	0.0000	4.6814	0.0000	5.1373	0.0000	1.9570	-
22823	PCL2	4.7360	0.0000	3.6173	0.0000	3.4844	0.0000	5.6792	0.0000	7.0730	-
5931	RbAp46	1.5823	0.0000	1.8870	0.0000	1.7736	0.0000	1.6714	0.0000	1.0527	-
23512	SUZ12	4.9163	0.0000	5.7724	0.0000	6.4711	0.0000	5.9826	0.0000	3.7533	-

<sup>a</sup>Fold changes calculated against the median expression level of skeletal muscle samples, considered significant if above 2

<sup>b</sup>p-values from t-tests examining differential expression compared to skeletal muscle (Bonferroni adjusted p-value=0.0063)